

## CLAIMS

Having thus described our invention in detail, what we claim as new and desire to secure by the Letters PATENT is:

- 5 1. A cured, non-woven mat comprising a mixture of fibers having different fiber lengths, said fibers containing a polysiloxane compound, and fixedly distributed in a binder.
2. The cured, non-woven mat of Claim 1 wherein from about 0 to about 100 weight  
10 % of said fibers have a fiber length of from about 0.5 to about 60 mm, and from about 0 to about 100 weight % of said fibers have a fiber length of from about 10 to about 150 mm.
3. The cured, non-woven mat of Claim 2 wherein from about 20 to about 80 weight  
15 % of said fibers have a fiber length of from about 10 to about 45 mm, and from about 20 to about 80 weight % of said fibers have a fiber length of from about 30 to about 80 mm.
4. The cured, non-woven mat of Claim 1 wherein said fibers comprise fibers of  
20 glass, wood, polyethylene, polypropylene, polyester, Nylon®, Orlon® or mixtures thereof.
5. The cured, non-woven mat of Claim 4 wherein said fibers are glass fibers having an average diameter of from about 1 to about 100  $\mu$ m.
- 25 6. The cured, non-woven mat of Claim 1 wherein said fibers are present in an amount of from about 50 to about 95 weight %, said polysiloxane is present in an amount of from about 0.001 to about 20 weight % and said binder is present in an amount of from about 5 to about 50 weight %.
- 30 7. The cured, non-woven mat of Claim 6 wherein said fibers are present in an amount of from about 65 to about 90 weight %, said polysiloxane is present in an

amount of from about 0.01 to about 10 weight % and said binder is present in an amount of from about 10 to about 35 weight %.

- 5 8. The cured, non-woven mat of Claim 1 wherein said binder is formaldehyde type binder containing between about 0.1 and about 20 weight % of a crosslinked styrene/(meth)acrylic polymer binder modifier.
- 10 9. The cured, non-woven mat of Claim 8 wherein said formaldehyde type binder comprises formaldehyde and a compound selected from the group consisting of urea, phenol, resorcinol, melamine and mixtures thereof.
10. The cured, non-woven mat of Claim 9 wherein said compound is urea.
- 15 11. The cured, non-woven mat of Claim 8 where the styrene/(meth)acrylic polymer is crosslinked with a polyfunctional nitrogen-containing crosslinking agent.
12. The cured, non-woven mat of Claim 1 wherein said polysiloxane is a polyalkylsiloxane.
- 20 13. The cured, non-woven mat of Claim 12 wherein said polyalkylsiloxane is polydimethylsiloxane.
14. The cured, non-woven mat of Claim 1 wherein said mat is a roofing material and is coated on at least one surface with asphalt.
- 25 15. The cured, non-woven mat of Claim 1 wherein said mat is a glass mat employed in a roofing shingle.
16. An asphalt coated roofing material comprising a cured non-woven mat that  
30 comprises a mixture of fibers having different fiber lengths, said fibers containing a polysiloxane compound, and fixedly distributed in a binder.

17. The asphalt coated roofing material of Claim 16 wherein from about 0 to about 100 weight % of said fibers have a fiber length of from about 0.5 to about 60 mm, and from about 0 to about 100 weight % of said fibers have a fiber length of from about 10 to about 150 mm.

5

18. The asphalt coated roofing material of Claim 16 wherein said fibers comprise fibers of glass, wood, polyethylene, polypropylene, polyester, Nylon®, Orlon® or mixtures thereof.

10 19. The asphalt coated roofing material of Claim 18 wherein said fibers are glass fibers having an average diameter of from about 1 to about 100  $\mu$ m.

20. The asphalt coated roofing material of Claim 16 wherein said fibers are present in an amount of from about 50 to about 95 weight %, said polysiloxane is present in  
15 an amount of from about 0.001 to about 20 weight % and said binder is present in an amount of from about 5 to about 50 weight %.

21. The asphalt coated roofing material of Claim 16 wherein said binder is formaldehyde type binder containing between about 0.1 and about 20 weight % of a  
20 crosslinked styrene/(meth)acrylic polymer binder modifier.

22. The asphalt coated roofing material of Claim 21 wherein said formaldehyde type binder comprises formaldehyde and a compound selected from the group consisting of urea, phenol, resorcinol, melamine and mixtures thereof.

25

23. The asphalt coated roofing material of Claim 22 wherein said compound is urea.

24. The asphalt coated roofing material of Claim 21 where the styrene/(meth)acrylic polymer is crosslinked with a polyfunctional nitrogen-containing crosslinking agent.

30

25. The asphalt coated roofing material of Claim 16 wherein said polysiloxane is a polyalkylsiloxane.

26. The asphalt coated roofing material of Claim 25 wherein said polyalkylsiloxane is polydimethylsiloxane.

5 27. The asphalt coating roofing material of Claim 16 wherein said fibers are glass fibers.

28. The asphalt coated roofing material of Claim 16 wherein said material is a shingle.

10

29. The asphalt coated roofing material of Claim 16 wherein said material is a sheet or roll.